

# JOB DESCRIPTION

Benchmark Job #351

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Ministry: Transportation and Highways  
Branch: Geotechnical  
Location: Burnaby

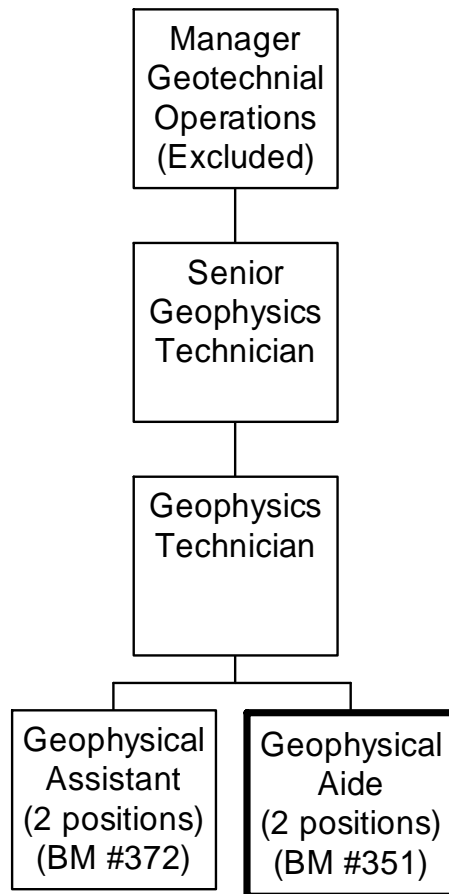
Working Title: **Geophysical Aide**  
Level: Range 11  
Classification: Engineering/Resource Aide

## PRIMARY FUNCTION

To provide field and office support in engineering, geophysical and on-site testing for geotechnical examinations.

## JOB DUTIES AND TASKS

1. Supports a Geophysical Assistant in completing field examinations for engineering, geophysical and insitu testing
  - a. collects data in electrical, electromagnetic, seismic, vibration monitoring, and other field surveys through assisting in the operation of testing instrumentation
  - b. collects data to be used in the assessment of engineering properties of soils and rock as required in geotechnical studies
  - c. assists in the handling and detonating of explosive charges (blaster's certificate is held by technician)
  - d. maintains complete and accurate records
  - e. uses hand and power tools, compass, hip chain, occasionally transit, and other equipment
  - f. performs routine testing and repair of scientific instrumentation and equipment (e.g. soldering wires on battery powered seismic recorder)
  - g. provides training to summer students who are under the supervision of the Technician.
2. Supports the processing and assessing of geophysical and on-site testing data involving compilation of results
  - a. processes data on computers using commercially prepared programs including inputting data, title, scale and contours
  - b. performs calculations related to basic drafting and surveying
  - c. prepares preliminary assessments of results for routine examinations
  - d. performs elementary drafting functions by hand and computers which are subject to review
3. Performs other related duties
  - a. drives to field sites to repair testing equipment
  - b. performs functions such as slashing survey lines, flagging, etc.
  - c. requests consumable supplies for use in the field



## REASON FOR CLASSIFICATION

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FACTOR NO.	REASON FOR CLASSIFICATION	DEGREE	CLASS. POINTS
1	<p><b>JOB KNOWLEDGE</b> Understand and apply the accepted methods of geophysical testing and the operation of testing equipment to collect and assess data.</p>	E	145
2	<p><b>MENTAL DEMANDS</b> Judgement to recognize known differences and determine the priority of tasks to collect a variety of geotechnical data and compile the results.</p>	C	60
3	<p><b>INTERPERSONAL COMMUNICATIONS SKILL</b> Discretion required to exchange information needing explanation to direct summer students in the completion of tasks.</p>	C	30
4	<p><b>PHYSICAL COORDINATION AND DEXTERITY</b> Significant coordination and dexterity is required to test and repair scientific instrumentation.</p>	D	22.5
5	<p><b>RESPONSIBILITY FOR WORK ASSIGNMENTS</b> Guided by specific procedures, selects a course of action to complete assignments using past practice to conduct routine geophysical and on-site tests and process data on standard software programs.</p>	C	50
6	<p><b>RESPONSIBILITY FOR FINANCIAL RESOURCES</b> Responsibility for financial resources to request consumable supplies for use in the field.</p>	A	5
7	<p><b>RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION</b> Moderate responsibility to use light vehicles to drive to field sites.</p>	C	15

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FACTOR NO.	REASON FOR CLASSIFICATION	DEGREE	CLASS. POINTS
8	<b>RESPONSIBILITY FOR HUMAN RESOURCES</b> Responsibility to provide formal training to summer students.	B	9
9	<b>RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS</b> Moderate care and attention to operate a vehicle as a designated driver to attend work sites.	C	15
10	<b>SENSORY EFFORT/MULTIPLE DEMANDS</b> Focussed sensory concentration to frequently visually focus on a computer screen when compiling and interpreting test data.	C	12
11	<b>PHYSICAL EFFORT</b> Heavy physical effort is required to frequently hike and climb while carrying testing equipment.	E	24
12	<b>SURROUNDINGS</b> Exposure to the elements and weather with no available shelter regularly when conducting field tests.	D	9
13	<b>HAZARDS</b> Significant exposure to hazards from frequently performing work on field trips in remote areas and from occasionally handling explosives.	D	9

**Total Points: 405.5**

**Level: Range 11**